Summary of WQAG discussion, August 9, 2000 on Antidegradation Framework Discussion Issues (8/22/00)

2.c. Antidegradation Framework discussion issues

A. How should existing water quality be determined (ambient background)? In other words, what should an ambient background determination protocol contain/require?
Options:
1. *Use fixed station monitoring data, when available, near point source. IDEM gather data for sites not monitored, as required.*
2. *Use fixed station monitoring data, when available. If not available, have permittee produce data showing ambient background for the parameter in question.. Develop guidelines for permittees to use.,*
3. *Have permittee produce data showing ambient background for the parameter in question.. Develop guidelines for permittees to use.*
4. *Make each review case specific.*

1. How much data is needed? How many analytical results are needed? Should the data be collected seasonally, annually, multi-annually?
Options:
   1. *10-40 samples - typical for statistical information.*
   2. *Even one sample has value. Depends on nature of contaminant*. O*nly one sample is needed for 303 listing*
   3. *No one protocol is going to work. Should be case specific. Need some type of template.*
   5. *Request that permittee generate one years worth of information. Permittee comes up with sampling and data information.*
   6. *IDEM will have some data – the source will provide additional data.*
   7. *In support of discharger doing evaluations, include biological evaluations.*

   Today we use whatever data is available – do not ask dischargers for additional data

2. Should a differentiation between wet and dry weather stream conditions be considered?
Options:
   1. *Have permittees sample and supply data at low flows using concentration, only . NPDES permit program is low stream flow protection.*
   2. *Handle each case individually. Need to know chemical, source, variation, etc. before setting sampling protocol. Three samples may be OK for BOD, but for chronic metals, more may be needed.*
   3. *Use Q710 data, only.*

4. *Sample anytime that is a non-storm event. This data should be about the same as low flow data and will discount for non-point sources during a storm event – important for TMDLs*

3. Should ambient background data be collected using a grab or composite method type? Both?
   Options:
   1. *Composite sampling is preferable, but may not be cost effective.*
   2. *Grabs may be appropriate for certain parameters.*

4. What method should be used to average ambient background data? Arithmetic, geometric mean, percentile?
   Options:
   1. *Currently using 50 percentile for GL and geometric for everything else.*
   2. *Establish different averaging for different parameters – acute vs. chronic.*
   3. *Mass loading would be geometric, if used in lieu of parameter concentration.*

5. Who should be responsible for collecting this data? Permittees, OWM, others, all of the above?
   Options:
   1. *Ask dischargers to collect data.*
   2. *Use our fixed monitoring data.*
   3. *Combination of 1 and 2.*

6. Who would be responsible for analyzing the data? How would the data be analyzed?
   IDEM will analyze data, not samples, based on protocol.

7. Establishing QA/QC?
   Options:
   1. *Use good collection processes.*
   2. *Use Surface Water Monitoring QA/QC*

Additional Points:

Don't ignore non-point-source, even though. NPDES permitting is driver to resolve immediate issues. Investigate EPA guidance for non-point source.